

NATIONAL TURFGRASS EVALUATION PROGRAM

The National Turfgrass Evaluation Program (NTEP) is designed to develop and coordinate uniform evaluation trials of turfgrass varieties and promising selections in the United States and Canada. Test results can be used by national companies and plant breeders to determine the broad picture of the adaptation of a cultivar. Results can also be used to determine if a cultivar is well adapted to a local area or level of turf maintenance.

Briefly, the NTEP is a self-supporting, non-profit program, sponsored by the Beltsville Agricultural Research Center and the National Turfgrass Federation, Inc. Program policy is made by a policy committee consisting of one member from each of the four (4) Regional Turfgrass Research Committees in the United States, one member from the Lawn Seed Division of the American Seed Trade Association, one member from the American Sod Producers Association, a national director, and an executive coordinator. The program will not make variety recommendations. However, the data from tests can be used by extension specialists and others for making recommendations.

The policy committee is responsible for determining program policy including, (1) requirements for submission of entries, (2) scheduling tests, (3) evaluation methods, (4) selecting standard or control test entries, (5) setting entry fees, (6) coordinating tests in their respective regions, (7) establishing guidelines for publication and data distribution and (8) scheduling committee meetings. The national director is responsible for the overall coordination and operation of the NTEP, including (1) soliciting entries and distribution of test seed sets to evaluators, (2) data summarization and distribution, and, (3) management of test materials, facilities, and finances.

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LOCATIONS SUBMITTING DATA FOR 1992

<u>State</u>	<u>Location</u>	<u>Code</u>
Alabama	Auburn University	AL1
California	Santa Clara	CA1
Illinois	Urbana	IL2
Iowa	Ames	IA1
New Jersey	North Brunswick	NJ1
New Jersey	Martinsville	NJ3
Oregon	Halsey	OR3
Rhode Island	Kingston	RI1
Virginia	Blacksburg	VA1
Washington	Pullman	WA1
Washington	Spokane	WA2

1989 NATIONAL BENTGRASS TEST

(Greens-Native Soil)

Entries and Sponsors

<u>Entry No.</u>	<u>Name</u>	<u>Species</u>	<u>Sponsor</u>
1	BR 1518	A. castellana (dryland bent)	USGA Green Section
2	Carmen	creeping	Advanta Seeds West, Inc.
3	Tracenta	colonial	Advanta Seeds West, Inc.
4	Putter	creeping	Jacklin Seed Co.
5	SR 1020	creeping	Seed Research of OR, Inc.
6	Providence	creeping	Seed Research of OR, Inc.
7	Bardot	colonial	Barenbrug USA
8	Penncross	creeping	Tee-2-Green Corp.
9	Pennlinks	creeping	Tee-2-Green Corp.
10	Egmont	A. capillaris (browntop bent)	Olsen-Fennell Seed Co.
11	Regent (Normarc 101)	creeping	Barenbrug USA
12	PRO/CUP (Forbes 89-12)	creeping	Forbes Seed & Grain
13	Lopez (WVPB 89-D-15)	creeping	Finelawn Research Corp.
14	National	creeping	Pickseed West, Inc.
15	88.CBE	creeping	International Seeds, Inc.
16	88.CBL	creeping	International Seeds, Inc.
17	Cobra	creeping	International Seeds, Inc.
18	Emerald	creeping	International Seeds, Inc.
19	Allure	colonial	Willamette Seed Co.

TABLE A.

1992 LOCATIONS, SITE DESCRIPTIONS AND MANAGEMENT PRACTICES IN
THE 1989 NATIONAL BENTGRASS (NATIVE SOIL - GREEN) TEST

LOCATION	SOIL TEXTURE	SOIL PH	SOIL PHOSPHOROUS (LBS/ACRE)	SOIL POTASSIUM (LBS/ACRE)	NITROGEN (LBS/1000 SQ. FT.)	SUN OR SHADE	MOWING HEIGHT (IN)	IRRIGATION PRACTICED
AL1	SANDY LOAM	4.6-5.5	61-150	0-150	2.1-3.0	FULL SUN	-	-
CA1	LOAM	6.1-6.5	61-150	0-150	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
IA1	SANDY CLAY LOAM	7.1-7.5	0-60	241-375	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
IL2	SILT LOAM AND SILT	-	-	-	4.1-5.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
NJ1	LOAM	6.1-6.5	151-270	241-375	4.1-5.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
NJ3	SANDY CLAY LOAM	-	-	-	-	FULL SUN	0.0-0.5	TO PREVENT STRESS
OR3	-	-	-	-	-	-	-	-
RI1	SILT LOAM AND SILT	6.6-7.0	-	241-375	4.1-5.0	FULL SUN	0.0-0.5	TO PREVENT DORMANCY
VA1	SILT LOAM AND SILT	6.1-6.5	61-150	241-375	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
WA1	SILT LOAM AND SILT	6.1-6.5	0-60	501+	4.1-5.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
WA2	LOAM	5.6-6.0	0-60	241-375	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT STRESS

FUNGICIDE USE IN 1992 (SUBMITTED TO NTEP)

LOCATION	FUNGICIDE	RATE (OZ./1000 SQ. FT.)	DATE(S) OF APPLICATION
IL2	VARIOUS PRODUCTS	LABEL RATE	THROUGHOUT SEASON TO PREVENT DISEASE
NJ1	CHLOROTHALONIL, IPRIDIONE OR TRIADIMEFON	LABEL RATE	6/2 - 9/21, SEVEN TOTAL APPLICATIONS
RI1	VINCLOZOLIN	2.0	6/12
	BROADWAY	8.0	8/21
	ANILAZINE	6.0	9/14, 11/9

TABLE B.

LOCATIONS AND DATA COLLECTED IN 1992

LOCATION	JANUARY QUALITY RATING	FEBRUARY QUALITY RATING	MARCH QUALITY RATING	APRIL QUALITY RATING	MAY QUALITY RATING	JUNE QUALITY RATING	JULY QUALITY RATING	AUGUST QUALITY RATING	SEPTEMBER QUALITY RATING	OCTOBER QUALITY RATING	NOVEMBER QUALITY RATING	DECEMBER QUALITY RATING	GENETIC COLOR RATING	SPRING GREENUP RATING
AL1	X	X	X	X	X	X	X	X	X	X				
CA1	X		X		X	X	X	X	X	X	X	X		
IA1				X	X	X	X	X	X	X				
IL2				X	X	X	X	X	X	X				
NJ1				X	X	X	X	X	X					
NJ3						X	X	X	X				X	X
OR3	X	X	X		X	X	X	X	X	X	X	X		
RI1					X	X	X	X	X	X	X			
VA1				X	X	X	X	X	X	X				
WA1			X	X		X	X	X		X				
WA2			X		X	X	X	X	X		X			X

TABLE B. (continued)

LOCATIONS AND DATA COLLECTED IN 1992

LOCATION	LEAF TEXTURE RATING	SPRING DENSITY	SUMMER DENSITY	FALL DENSITY	THATCH MEASUREMENTS	FUSARIUM PATCH	DOLLAR SPOT	BROWN PATCH	PCT POA MAY	PCT POA JUN	PCT POA JUL	PCT POA AUG	PCT POA SEP
AL1													
CA1					X				X	X	X	X	X
IA1													
IL2								X					
NJ1													
NJ3	X		X	X									
OR3													
RI1							X						
VA1							X						
WA1						X							
WA2		X		X									

TABLE 1. MEAN TURFGRASS QUALITY RATINGS OF BENTGRASS CULTIVARS GROWN ON A
NATIVE SOIL GREEN AT ELEVEN LOCATIONS IN THE U.S. AND CANADA
1992 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 1/												
NAME	AL1	CA1	IA1	IL2	NJ1	NJ3	OR3	RI1	VA1	WA1	WA2	MEAN
* PRO/CUP (FORBES 89-12)	3.8	6.5	7.5	5.0	6.9	6.4	6.3	6.8	4.4	7.2	6.4	6.1
* PROVIDENCE	3.6	6.3	6.7	5.1	6.7	6.2	6.1	7.6	4.6	7.1	7.0	6.1
* PENNLINKS	4.1	6.5	7.2	5.0	6.2	5.1	6.0	6.8	4.9	7.2	7.0	6.0
88.CBL	4.0	6.5	7.3	4.4	6.4	5.8	6.4	6.0	4.6	7.1	6.9	5.9
88.CBE	5.0	5.9	7.0	4.0	6.3	6.1	6.5	6.2	4.4	7.1	6.9	5.9
* LOPEZ (WVPB 89-D-15)	3.8	5.8	7.1	5.3	6.5	6.3	5.6	6.2	4.3	6.8	6.9	5.9
* PUTTER	4.4	5.8	7.1	5.0	5.9	5.4	5.6	7.3	4.2	6.6	7.1	5.9
* REGENT (NORMARC 101)	4.5	6.0	6.8	4.8	6.5	5.4	4.6	7.0	4.8	7.1	7.0	5.9
* SR 1020	3.7	7.1	7.4	5.1	5.9	6.6	5.9	6.1	3.4	6.8	5.9	5.8
* COBRA	4.3	6.1	6.3	4.1	6.1	5.2	6.2	6.6	4.9	6.8	6.7	5.7
* PENNCROSS	4.5	5.5	6.6	4.5	6.1	6.1	5.5	6.0	5.2	6.6	6.7	5.7
* CARMEN	5.0	6.3	7.0	4.2	5.8	4.5	5.4	5.5	3.6	6.3	6.6	5.5
* EMERALD	4.8	5.4	6.0	4.9	5.3	3.8	5.6	5.0	3.8	6.7	6.3	5.2
* NATIONAL	4.0	4.7	6.1	4.0	4.9	4.4	4.9	5.4	4.4	5.9	6.1	5.0
* BARDOT	6.3	4.3	5.9	4.1	4.6	2.5	4.1	4.2	4.9	5.4	5.6	4.7
* EGMONT	5.5	4.5	4.4	4.4	4.7	2.2	4.0	5.6	5.0	5.5	4.4	4.6
* TRACENTA	6.4	3.8	5.0	3.8	4.5	2.8	3.5	4.3	4.4	5.6	5.8	4.5
ALLURE	5.2	4.0	3.9	3.1	3.3	1.4	3.9	4.3	4.2	4.8	5.0	3.9
BR 1518	6.0	3.4	3.6	3.0	2.8	2.3	2.5	4.8	3.9	4.3	3.7	3.7
LSD VALUE	1.1	0.9	0.7	0.8	0.6	1.6	0.7	0.7	0.9	0.7	0.6	0.3

* COMMERCIALY AVAILABLE IN THE UNITED STATES IN 1993

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 2. MEAN TURFGRASS QUALITY RATINGS OF BENTGRASS CULTIVARS FOR EACH MONTH GROWN
ON A NATIVE SOIL GREEN AT ELEVEN LOCATIONS IN THE U.S. AND CANADA
1992 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 1/													
NAME	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
PRO/CUP (FORBES 89-12)	4.6	4.2	5.6	5.8	6.0	6.5	6.4	6.2	6.1	6.1	5.9	6.3	6.1
PROVIDENCE	4.3	4.5	6.0	5.6	6.1	6.1	6.2	6.2	6.2	5.9	6.2	6.2	6.1
PENNLINKS	4.4	4.8	5.7	5.4	6.0	6.0	6.2	6.3	5.9	6.2	6.5	6.7	6.0
88.CBL	4.6	4.8	6.0	5.7	6.0	6.1	6.1	5.8	5.8	5.8	6.6	6.8	5.9
88.CBE	4.6	5.5	6.1	5.7	6.0	6.3	6.0	5.9	5.8	5.7	5.9	6.7	5.9
LOPEZ (WVPB 89-D-15)	4.7	4.2	5.4	5.8	6.0	5.8	6.0	6.0	5.9	5.7	5.4	6.2	5.9
FUTTER	4.4	4.3	5.4	5.3	6.1	6.2	5.8	6.0	6.0	5.9	6.0	5.7	5.9
REGENT (NORMARC 101)	4.1	4.2	5.8	5.8	5.9	6.0	5.8	6.0	5.8	5.7	5.6	5.8	5.9
SR 1020	4.9	4.5	6.0	5.0	5.9	5.9	5.9	5.7	6.0	5.7	5.5	7.0	5.8
COBRA	4.3	4.8	5.9	5.7	5.9	5.9	5.8	5.6	5.7	5.8	6.2	6.3	5.7
PENNCROSS	4.1	4.3	5.1	5.8	5.5	5.8	6.1	6.0	5.8	5.6	5.6	5.5	5.7
CARMEN	4.7	5.2	5.2	5.2	5.6	5.7	5.7	5.6	5.5	5.5	5.4	5.7	5.5
EMERALD	4.4	5.0	5.1	5.3	5.2	4.9	5.4	5.5	5.6	5.4	5.3	5.3	5.2
NATIONAL	3.9	4.0	4.8	5.1	4.9	4.8	5.1	5.1	5.3	5.0	5.1	5.2	5.0
BARDOT	3.7	6.5	5.3	5.4	5.3	4.6	4.8	4.6	4.7	4.3	4.6	4.7	4.7
EGMONT	4.6	5.2	4.6	4.8	4.7	4.6	4.7	4.6	4.6	4.4	4.7	4.7	4.6
TRACENTA	3.7	5.0	4.8	5.0	4.9	4.5	4.5	4.5	4.5	4.5	4.1	4.7	4.5
ALLURE	4.1	5.0	4.5	4.7	4.3	3.7	3.7	3.9	3.8	4.0	4.6	4.7	3.9
BR 1518	3.3	4.8	3.6	4.1	4.2	3.5	3.6	3.7	3.6	3.7	3.6	3.7	3.7
ISD VALUE	1.1	1.6	1.0	0.9	0.8	0.7	0.7	0.7	0.8	0.8	1.1	0.9	0.5

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 3. RANKING OF MEAN TURFGRASS QUALITY RATINGS OF BENTGRASS CULTIVARS GROWN
ON A NATIVE SOIL GREEN AT ELEVEN LOCATIONS IN THE U.S. AND CANADA 1/
1992 DATA

QUALITY RANKINGS; 1=HIGHEST MEAN: STATE LOCATIONS REPORTING 2/

NAME	AL1	CA1	IA1	IL2	NJ1	NJ3	OR3	RI1	VA1	WA1	WA2	MEAN
PRO/CUP (FORBES 89-12)	16	4	1	4.5	1.0	2.0	3	4.5	11.0	1.5	11.0	1
PROVIDENCE	19	5	10	2.0	2.0	4.0	5	1.0	7.0	5.5	4.0	2
PENNLINKS	13	2	4	6.0	7.0	11.0	6	4.5	3.5	1.5	2.5	3
88.CBL	15	3	3	10.5	5.0	7.0	2	11.0	8.0	3.5	6.0	4
88.CBE	7	9	8	16.0	6.0	5.5	1	7.5	11.0	3.5	7.0	5
LOPEZ (WVPB 89-D-15)	17	11	6	1.0	3.5	3.0	10	7.5	13.0	8.5	5.0	6
FUTTER	11	10	5	4.5	10.5	8.5	9	2.0	14.5	11.0	1.0	7
REGENT (NORMARC 101)	9	8	9	8.0	3.5	8.5	14	3.0	6.0	5.5	2.5	8
SR 1020	18	1	2	3.0	10.5	1.0	7	9.0	19.0	8.5	14.0	9
COBRA	12	7	12	14.0	8.0	10.0	4	6.0	5.0	7.0	8.0	10
PENNCROSS	10	12	11	9.0	9.0	5.5	11	10.0	1.0	12.0	9.0	11
CARMEN	6	6	7	12.0	12.0	12.0	12	13.0	18.0	13.0	10.0	12
EMERALD	8	13	14	7.0	13.0	14.0	8	15.0	17.0	10.0	12.0	13
NATIONAL	14	14	13	15.0	14.0	13.0	13	14.0	9.0	14.0	13.0	14
EARDOT	2	16	15	13.0	16.0	16.0	15	19.0	3.5	17.0	16.0	15
EGMONT	4	15	17	10.5	15.0	18.0	16	12.0	2.0	16.0	18.0	16
TRACENTA	1	18	16	17.0	17.0	15.0	18	17.5	11.0	15.0	15.0	17
ALLURE	5	17	18	18.0	18.0	19.0	17	17.5	14.5	18.0	17.0	18
BR 1518	3	19	19	19.0	19.0	17.0	19	16.0	16.0	19.0	19.0	19

1/ THIS TABLE CONTAINS NO STATISTICAL VALUES (LSD VALUES), THEREFORE IT SHOULD ONLY BE USED TO DETERMINE THE GENERAL PERFORMANCE OF AN ENTRY OR ENTRIES ACROSS SEVERAL LOCATIONS OR REGIONS. TO ASSESS STATISTICAL DIFFERENCES AMONG ENTRIES, REFER TO THE MEANS AND LSD VALUES FOUND IN TABLE 1.

2/ RANKING OF MEAN TURFGRASS QUALITY IS ACHIEVED BY ASSIGNING "1" TO THE HIGHEST MEAN, "2" TO THE SECOND HIGHEST MEAN, ETC. FOR EACH LOCATION. FOR EXAMPLE, IF TWO MEANS ARE TIED FOR THE SECOND AND THIRD RANKS, BOTH ARE ASSIGNED "2.5".

TABLE 4. GENETIC COLOR RATINGS OF BENTGRASS CULTIVARS
GROWN ON A NATIVE SOIL GREEN
1992 DATA

GENETIC COLOR RATINGS 1-9; 9=DARK GREEN 1/

NAME	NJ3	MEAN
88.CBE	7.0	7.0
88.CBL	6.7	6.7
SR 1020	6.7	6.7
COBRA	6.3	6.3
REGENT (NORMARC 101)	6.3	6.3
PRO/CUP (FORBES 89-12)	6.0	6.0
PROVIDENCE	6.0	6.0
PUTTIER	5.7	5.7
LOPEZ (WVPB 89-D-15)	5.7	5.7
PENNCROSS	5.3	5.3
BARDOT	5.0	5.0
CARMEN	5.0	5.0
PENNLINKS	5.0	5.0
TRACENTA	5.0	5.0
NATIONAL	4.7	4.7
ALLURE	4.3	4.3
BR 1518	4.3	4.3
EGMONT	4.3	4.3
EMERALD	4.3	4.3
LSD VALUE	1.3	1.3

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 5. SPRING GREENUP RATINGS OF BENIGRASS CULTIVARS
 GROWN ON A NATIVE SOIL GREEN
 1992 DATA

SPRING GREENUP RATINGS 1-9; 9=COMPLETELY GREEN 1/

NAME	NJ3	WA2	MEAN
BARDOT	6.0	8.3	7.2
ALLURE	5.7	8.0	6.8
SR 1020	5.3	8.3	6.8
88.CBL	5.7	7.7	6.7
EGMONT	5.7	7.7	6.7
NATIONAL	5.0	8.3	6.7
TRACENTA	5.7	7.7	6.7
88.CBE	5.3	8.0	6.7
REGENT (NORMARC 101)	5.0	8.0	6.5
PENNCROSS	4.7	8.3	6.5
PUTTER	4.7	8.3	6.5
LOPEZ (WVPB 89-D-15)	5.0	8.0	6.5
PROVIDENCE	4.7	8.0	6.3
EMERALD	4.0	8.3	6.2
COBRA	4.3	8.0	6.2
PENNLINKS	4.3	8.0	6.2
PRO/CUP (FORBES 89-12)	4.0	7.7	5.8
BR 1518	4.7	6.7	5.7
CARMEN	3.7	7.7	5.7
LSD VALUE	1.3	1.1	0.9

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
 STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 6. LEAF TEXTURE RATINGS OF BENTGRASS CULTIVARS
GROWN ON A NATIVE SOIL GREEN
1992 DATA

LEAF TEXTURE RATINGS 1-9; 9=VERY FINE 1/

NAME	NJ3	MEAN
SR 1020	7.0	7.0
88.CBE	6.3	6.3
BARDOT	6.3	6.3
PRO/CUP (FORBES 89-12)	6.3	6.3
88.CBL	6.0	6.0
PROVIDENCE	6.0	6.0
COBRA	5.7	5.7
EGMONT	5.7	5.7
REGENT (NORMARC 101)	5.7	5.7
PUTTER	5.7	5.7
LOPEZ (WVPB 89-D-15)	5.7	5.7
CARMEN	5.3	5.3
PENNCROSS	5.3	5.3
PENNLINKS	5.3	5.3
TRACENTA	5.3	5.3
NATIONAL	5.0	5.0
BR 1518	4.7	4.7
ALLURE	4.3	4.3
EMERALD	4.3	4.3
LSD VALUE	1.4	1.4

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 7. SPRING DENSITY RATINGS OF BENIGRASS CULTIVARS
GROWN ON A NATIVE SOIL GREEN
1992 DATA

DENSITY RATINGS 1-9; 9=MAXIMUM DENSITY 1/

NAME	WA2	MEAN
88.CBE	8.7	8.7
PROVIDENCE	8.7	8.7
88.CBL	8.0	8.0
COBRA	8.0	8.0
REGENT (NORMARC 101)	8.0	8.0
PUTTER	8.0	8.0
LOPEZ (WVPB 89-D-15)	8.0	8.0
PENNCROSS	7.7	7.7
PENNLINKS	7.7	7.7
SR 1020	7.7	7.7
CARMEN	7.3	7.3
PRO/CUP (FORBES 89-12)	7.3	7.3
NATIONAL	7.3	7.3
ALLURE	7.0	7.0
BARDOT	7.0	7.0
EMERALD	7.0	7.0
TRACENTA	7.0	7.0
BR 1518	6.0	6.0
EGMONT	6.0	6.0
LSD VALUE	0.7	0.7

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 8. SUMMER DENSITY RATINGS OF BENIGRASS CULTIVARS
GROWN ON A NATIVE SOIL GREEN
1992 DATA

DENSITY RATINGS 1-9; 9=MAXIMUM DENSITY 1/

NAME	NJ3	MEAN
PRO/CUP (FORBES 89-12)	6.7	6.7
SR 1020	6.7	6.7
88.CBE	6.3	6.3
PENNCROSS	6.3	6.3
PROVIDENCE	6.0	6.0
PUTTER	6.0	6.0
88.CBL	5.7	5.7
REGENT (NORMARC 101)	5.7	5.7
LOPEZ (WVPB 89-D-15)	5.7	5.7
COBRA	5.3	5.3
PENNLINKS	5.3	5.3
CARMEN	5.0	5.0
EMERALD	5.0	5.0
NATIONAL	5.0	5.0
BARDOT	4.0	4.0
TRACENTA	3.7	3.7
EGMONT	3.0	3.0
ALLURE	2.0	2.0
BR 1518	2.0	2.0
LSD VALUE	2.0	2.0

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 9. FALL DENSITY RATINGS OF BENTGRASS CULTIVARS
GROWN ON A NATIVE SOIL GREEN
1992 DATA

DENSITY RATINGS 1-9; 9=MAXIMUM DENSITY 1/

NAME	NJ3	WA2	MEAN
88.CBE	6.7	9.0	7.8
PRO/CUP (FORBES 89-12)	6.3	9.0	7.7
SR 1020	6.7	8.7	7.7
88.CBL	6.0	9.0	7.5
COBRA	6.3	8.7	7.5
PROVIDENCE	5.7	9.0	7.3
REGENT (NORMARC 101)	5.7	8.7	7.2
LOPEZ (WVPB 89-D-15)	5.3	8.7	7.0
PENNLINKS	4.7	9.0	6.8
PENNCROSS	5.0	8.3	6.7
NATIONAL	4.7	8.7	6.7
PUTTER	5.3	7.7	6.5
CARMEN	4.0	8.3	6.2
EMERALD	4.3	7.7	6.0
TRACENTA	3.7	8.0	5.8
BARDOT	3.0	8.0	5.5
EGMONT	3.7	7.3	5.5
ALLURE	1.7	7.7	4.7
BR 1518	2.3	6.7	4.5
LSD VALUE	1.5	1.5	1.0

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 10. THATCH MEASUREMENTS OF BENTGRASS CULTIVARS
GROWN ON A NATIVE SOIL GREEN
1992 DATA

THATCH MEASUREMENTS IN MILLIMETERS 1/

NAME	CA1	MEAN
PRO/CUP (FORBES 89-12)	34.7	34.7
EMERALD	33.0	33.0
PENNLINKS	32.0	32.0
PUTTER	31.0	31.0
LOPEZ (WVPB 89-D-15)	31.0	31.0
88.CBL	29.7	29.7
PENNCROSS	29.7	29.7
CARMEN	29.3	29.3
SR 1020	29.3	29.3
TRACENTA	29.3	29.3
REGENT (NORMARC 101)	29.0	29.0
PROVIDENCE	28.7	28.7
88.CBE	27.7	27.7
NATIONAL	27.3	27.3
ALLURE	26.7	26.7
COBRA	24.7	24.7
EGMONT	24.7	24.7
BARDOT	23.7	23.7
BR 1518	14.7	14.7
LSD VALUE	6.7	6.7

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 11. FUSARIUM PATCH RATINGS OF BENIGRASS CULTIVARS
GROWN ON A NATIVE SOIL GREEN
1992 DATA

FUSARIUM PATCH RATINGS 1-9; 9=NO DISEASE 1/

NAME	WA1	MEAN
PUTTER	3.0	3.0
CARMEN	2.7	2.7
88.CBE	2.0	2.0
ALLURE	2.0	2.0
BR 1518	2.0	2.0
PRO/CUP (FORBES 89-12)	2.0	2.0
NATIONAL	2.0	2.0
COBRA	1.7	1.7
EGMONT	1.7	1.7
REGENT (NORMARC 101)	1.7	1.7
PENNLINKS	1.7	1.7
SR 1020	1.7	1.7
TRACENTA	1.7	1.7
BARDOT	1.3	1.3
EMERALD	1.3	1.3
PENNCROSS	1.3	1.3
PROVIDENCE	1.3	1.3
LOPEZ (WVPB 89-D-15)	1.3	1.3
88.CBL	1.0	1.0
LSD VALUE	1.5	1.5

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 12. DOLLAR SPOT RATINGS OF BENTGRASS CULTIVARS
GROWN ON A NATIVE SOIL GREEN
1992 DATA

DOLLAR SPOT RATINGS 1-9; 9=NO DISEASE 1/

NAME	RI1	VA1	MEAN
EGMONT	8.7	9.0	8.8
TRACENTA	8.0	9.0	8.5
BARDOT	7.7	8.7	8.2
BR 1518	7.3	9.0	8.2
PENNLINKS	7.0	9.0	8.0
88.CBE	6.7	9.0	7.8
PROVIDENCE	7.3	8.3	7.8
NORMARC 101 (REGENT)	7.0	8.7	7.8
ALLURE	8.0	7.3	7.7
PENNCROSS	7.0	8.0	7.5
NATIONAL	6.0	8.3	7.2
COBRA	6.3	8.0	7.2
PUTTER	6.7	7.3	7.0
88.CBL	5.0	8.3	6.7
FORBES 89-12 (PRO/CUP)	5.7	7.7	6.7
WVPB 89-D-15 (LOPEZ)	6.0	7.3	6.7
CARMEN	4.3	7.0	5.7
EMERALD	4.7	6.0	5.3
SR 1020	5.3	3.3	4.3
LSD VALUE	1.8	1.3	1.1

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 13. BROWN PATCH RATINGS OF BENTGRASS CULTIVARS
GROWN ON A NATIVE SOIL GREEN
1992 DATA

BROWN PATCH RATINGS 1-9; 9=NO DISEASE 1/

NAME	IL2	MEAN
88.CBE	9.0	9.0
88.CBL	9.0	9.0
CARMEN	9.0	9.0
COBRA	9.0	9.0
EMERALD	9.0	9.0
PRO/CUP (FORBES 89-12)	9.0	9.0
NATIONAL	9.0	9.0
REGENT (NORMARC 101)	9.0	9.0
PENNCROSS	9.0	9.0
PENNLINKS	9.0	9.0
PROVIDENCE	9.0	9.0
PUTTER	9.0	9.0
SR 1020	9.0	9.0
LOPEZ (WVPB 89-D-15)	9.0	9.0
ALLURE	8.0	8.0
BR 1518	8.0	8.0
TRACENTA	8.0	8.0
EGMONT	7.3	7.3
BARDOT	6.0	6.0
LSD VALUE	0.9	0.9

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 14. PERCENT POA ANNUA (MAY) RATINGS OF BENTGRASS CULTIVARS
GROWN ON A NATIVE SOIL GREEN
1992 DATA

PERCENT POA ANNUA: LOCATIONS 1/		
NAME	CA1	MEAN
TRACENTA	60.0	60.0
BARDOT	56.7	56.7
ALLURE	53.3	53.3
BR 1518	53.3	53.3
NATIONAL	46.7	46.7
EMERALD	33.3	33.3
EGMONT	28.3	28.3
PENNCROSS	15.0	15.0
LOPEZ (WVPB 89-D-15)	13.3	13.3
88.CEE	10.0	10.0
REGENT (NORMARC 101)	10.0	10.0
PENNLINKS	10.0	10.0
88.CEL	5.0	5.0
CARMEN	5.0	5.0
COBRA	5.0	5.0
PRO/CUP (FORBES 89-12)	5.0	5.0
PROVIDENCE	5.0	5.0
PUTTER	5.0	5.0
SR 1020	3.3	3.3
LSD VALUE	18.4	18.4

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 15. PERCENT POA ANNUA (JUNE) RATINGS OF BENTGRASS CULTIVARS
GROWN ON A NATIVE SOIL GREEN
1992 DATA

PERCENT POA ANNUA: LOCATIONS 1/		
NAME	CA1	MEAN
TRACENTA	56.7	56.7
BARDOT	43.3	43.3
BR 1518	43.3	43.3
ALLURE	33.3	33.3
NATIONAL	30.0	30.0
EGMONT	24.0	24.0
EMERALD	18.3	18.3
88.CEE	10.0	10.0
REGENT (NORMARC 101)	10.0	10.0
PENNCROSS	10.0	10.0
LOPEZ (WVPB 89-D-15)	10.0	10.0
PENNLINKS	6.7	6.7
88.CBL	5.0	5.0
CARMEN	5.0	5.0
COBRA	5.0	5.0
PRO/CUP (FORBES 89-12)	5.0	5.0
PROVIDENCE	5.0	5.0
PUTTER	5.0	5.0
SR 1020	3.3	3.3
LSD VALUE	18.8	18.8

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 16. PERCENT POA ANNUA (JULY) RATINGS OF BENTGRASS CULTIVARS
GROWN ON A NATIVE SOIL GREEN
1992 DATA

PERCENT POA ANNUA: LOCATIONS 1/		
NAME	CA1	MEAN
BR 1518	53.3	53.3
TRACENTA	46.7	46.7
BARDOT	40.0	40.0
ALLURE	38.3	38.3
NATIONAL	25.0	25.0
EGMONT	18.3	18.3
88.CEE	11.7	11.7
EMERALD	11.7	11.7
LOPEZ (WVPB 89-D-15)	10.0	10.0
PENNCROSS	8.3	8.3
88.CEL	6.7	6.7
REGENT (NORMARC 101)	6.0	6.0
PROVIDENCE	6.0	6.0
COBRA	5.7	5.7
PUTTER	5.0	5.0
CARMEN	4.3	4.3
PRO/CUP (FORBES 89-12)	4.3	4.3
PENNLINKS	4.3	4.3
SR 1020	2.3	2.3
LSD VALUE	15.7	15.7

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 17. PERCENT POA ANNUA (AUGUST) RATINGS OF BENTGRASS CULTIVARS
GROWN ON A NATIVE SOIL GREEN
1992 DATA

PERCENT POA ANNUA: LOCATIONS 1/		
NAME	CA1	MEAN
BR 1518	66.7	66.7
BARDOT	48.3	48.3
TRACENTA	48.3	48.3
ALLURE	45.0	45.0
NATIONAL	30.0	30.0
EGMONT	28.3	28.3
88.CEE	15.0	15.0
EMERALD	15.0	15.0
LOPEZ (WVPB 89-D-15)	15.0	15.0
PENNCROSS	13.3	13.3
COBRA	11.7	11.7
88.CBL	10.0	10.0
CARMEN	8.3	8.3
REGENT (NORMARC 101)	8.3	8.3
PUTTER	8.3	8.3
PENNLINKS	6.7	6.7
PROVIDENCE	6.7	6.7
PRO/CUP (FORBES 89-12)	5.0	5.0
SR 1020	5.0	5.0
LSD VALUE	18.7	18.7

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 18. PERCENT POA ANNUA (SEPTEMBER) RATINGS OF BENTGRASS CULTIVARS
GROWN ON A NATIVE SOIL GREEN
1992 DATA

PERCENT POA ANNUA: LOCATIONS 1/		
NAME	CA1	MEAN
BR 1518	62.3	62.3
BARDOT	42.3	42.3
TRACENTA	41.7	41.7
ALLURE	41.0	41.0
EGMONT	31.3	31.3
NATIONAL	22.3	22.3
EMERALD	14.0	14.0
LOPEZ (WVPB 89-D-15)	10.7	10.7
COBRA	9.3	9.3
PENNCROSS	8.3	8.3
88.CBE	7.7	7.7
CARMEN	7.7	7.7
PUTTER	6.0	6.0
REGENT (NORMARC 101)	5.3	5.3
PROVIDENCE	5.3	5.3
PENNLINKS	5.0	5.0
88.CBL	4.3	4.3
PRO/CUP (FORBES 89-12)	3.0	3.0
SR 1020	2.0	2.0
LSD VALUE	17.5	17.5

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).